IN THE CLAIMS

Please amend the claims as follows:

Claims 1-20 (Canceled).

Claim 21 (New): A shaping control method performing shaping control so that transfer speed of packets is within a reference speed predetermined in advance, the method comprising:

setting accuracy of a transfer time of connections for which the packets belong, in accordance with a time interval up to an actual transfer time of the connections in stages, by each of shaping subjects; and

wherein the accuracy of the transfer time of the connections is set higher in stages at a time nearer to an actual transfer time of the connections.

Claim 22 (New): A shaping control method performing shaping control so that transfer speed of packets is within a reference speed predetermined in advance, the method comprising:

setting accuracy of a transfer time of connections for which the packets belong, in accordance with a time interval up to an actual transfer time of the connections in stages, by each of shaping subjects; and

wherein the accuracy of the transfer time of the connections is set in n (n is an integer equal to or more than 2) stages;

wherein the packets of each connection are distributed to any among said n stages in accordance with the time interval up to an actual transfer time of the connections; and

wherein in the stage that time accuracy is highest, the packets are managed in a transfer order, and in the other stages, the packets are managed by being divided into standardized time slots.

Claim 23 (New): The shaping control method according to claim 22,

wherein the time interval of a time slot in a stage of mth order (m is an integer equal to or more than 2) with reference to the actual transfer time of the connections is set shorter than that in a stage of (m+1)th order.

Claim 24 (New): A shaping control apparatus performing shaping control so that a transfer speed of packets is within a reference speed predetermined in advance, comprising:

theoretical transfer time calculating means configured to calculate theoretical transfer time of connections for which the packets belong;

first holding means configured to hold information relating to the calculated theoretical transfer time by dividing said information into standardized time slots, while connecting with the connections for which the packets belong;

second holding means configured to add information relating to a transfer order to a portion of said information held in said first holding means, and to hold the added information by linking with the connections for which the packets belong; and

extracting means configured to compare the theoretical transfer time corresponding to said information held in said second holding means with a reference time, and to extract the information before said reference time,

wherein the packets belonging to the connections are transferred based on the information extracted by said extracting means.

Claim 25 (New): The shaping control apparatus according to claim 24,

wherein said theoretical transfer time calculating means calculates again the theoretical transfer time of the connection based on the transfer time of the connection for which the packets extracted by said extracting means belong.

Claim 26 (New): The shaping control apparatus according to claim 24,

wherein said first holding means sets a plurality of time series different from each other based on categories of the connections including at least one of types of output ports, types of line qualities, and types of communication speeds, and divides into these time series the connections for which the packets belong.

Claim 27 (New): The shaping control apparatus according to claim 24,

wherein said first holding means sets a plurality of time series having standardized times different from each other, and divides into these time series the connections for which the packets belong.

Claim 28 (New): The shaping control apparatus according to claim 27,

wherein said first holding means sets standardized times corresponding to a plurality of said time series, respectively, based on categories of the connections including at least one of types of output ports, types of line qualities, and types of communication speeds.

Claim 29 (New): The shaping control apparatus according to claim 26,

wherein said extracting means assigns priorities based on the categories of the connections, and allows a portion of said information held in said first holding means to hold in said second holding means based on the assigned priorities.

Claim 30 (New): The shaping control apparatus according to claim 29,

wherein said extracting means assigns priorities based on categories of said connections, and allows a portion of said information held in said first holding means to hold in said second holding means based on the assigned priorities.

Claim 31 (New): The shaping control apparatus according to claim 24,

wherein said second holding means allows a portion of said information held in said first holding means to hold in said second holding means, when a time difference between the theoretical transfer time calculated by said theoretical transfer time calculating means and said reference time is within a prescribed time.

Claim 32 (New): The shaping control apparatus according to claim 24,

wherein said second holding means holds a transferable identifier showing whether or not to transfer the connections for which the packets belong by linking with the connections, said identifier being connected,

further comprising identifier setting means configured to set said transferable identifier corresponding to the connections for which the packets having said theoretical transfer time before said reference time belong, to be transferable,

wherein said extracting means extracts information relating to the connections for which said transfer-able identifier is set to be transfer-able, among the connections held in said second holding means.

Claim 33 (New): The shaping control apparatus according to claim 24,

wherein said extracting means manages said information held in said first holding means by a LIFO (Last In Fast Out) method.

Claim 34 (New): A shaping control apparatus performing shaping control so that a transfer speed of packets is within a reference speed predetermined in advance, comprising:

theoretical transfer time calculating means configured to calculate a theoretical transfer time of connections for which packets belong;

packet information holding means configured to hold information relating to the packets by each connection, before said theoretical transfer time calculating means calculates the theoretical transfer time of the connection for which the packets belong;

first holding means configured to divide the calculated information relating to said theoretical transfer time at a standardized time unit, and to hold the divided information by linking with the connection for which the packets belong;

second holding means configured to add a portion of said information held in said first holding means to information relating to a transfer order, and to hold the added information by linking with the connection for which the packets belong; and

extracting means configured to extract a packet of a same connection as the connection for which the packet transferred from said second holding means belongs, from said packet information holding means, and to transfer the extracted packet to said theoretical transfer time calculating means.

Claim 35 (New): The shaping control apparatus according to claim 34,

wherein said packet information holding means transfers the information relating to the packet to said theoretical transfer time calculating means so that a plurality of packets belonging to the same connection do not exist in said first and second holding means.

Claim 36 (New): The shaping control apparatus according to claim 34,

wherein said first holding means sets a plurality of time series different from each other based on categories of the connections including at least one of types of output ports, types of line qualities, and types of communication speeds, and divides into these time series the connections for which the packets belong.

Claim 37 (New): The shaping control apparatus according to claim 34,

wherein said first holding means sets a plurality of time series having standardized times different from each other, and divides into these time series the connections for which the packets belong.

Claim 38 (New): The shaping control apparatus according to claim 36,

wherein said extracting means assigns priorities based on categories of the connections, and allows a portion of said information held in said first holding means to hold in said second holding means based on the assigned priorities.

Claim 39 (New): The shaping control apparatus according to claim 34,

wherein said extracting means manages said information held in said first holding means by a LIFO (Last In Fast Out) method.